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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,517	02/12/2004	Tae-Young Kil	P57032	5338

7590  
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05/14/2008

EXAMINER
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VO, NGUYEN THANH

ART UNIT	PAPER NUMBER
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2618

MAIL DATE	DELIVERY MODE
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05/14/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/776,517	<b>Applicant(s)</b> KIL ET AL.	
	<b>Examiner</b> NGUYEN VO	<b>Art Unit</b> 2618	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 and 17-30 is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-16 and 31-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/12/04, 6/15/06, 5/10/07, 9/5/07</u> .                       | 6) <input type="checkbox"/> Other: _____                          |



## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of Group I, including claims 1-12, 14-39 in the reply filed on 02/25/2008 is acknowledged. The traversal is found persuasive.

Accordingly, all claims 1-39 are examined in this action.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding independent claims 1 and 6, the original specification fails to support the newly-added claimed limitation "**independent of** whether an extension location is inside or outside".

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-8, 31-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, the recitation "whether an extension location is inside or outside" renders the claim indefinite because it is not clear with respect to what an extension is inside or outside.

As to claims 6, 31, they are rejected for the same reasons as set forth in claim 1 above.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 14-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 14-16, they recites a computer-readable medium which is defined in the specification as carrier waves, wireless media (radio frequency, infrared microwaves, wired media). See paragraph [0317] of the specification. Since the medium such as carrier waves, wireless media (radio frequency, infrared microwaves, wired media) are tangible, the claimed invention of claims 14-16 is directed to non-statutory subject matter. In order to overcome this rejection, it is suggested that the mentioned-above tangible media should be deleted from the specification.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar (US 2003/0134650) in view of Kil (US 2001/0046859).

As to claim 9, Sundar discloses a complex wireless service method of a wired and wireless communication system (see wired communication system 112 and wireless communication system including MSC 110, BSC 106 and BTS 104 in figure 3) including a complex wireless terminal 102 (see figure 3) for supporting plural band and plural mode (see paragraph [0051]), a home location register 114 for storing whether the complex wireless terminal is located in the premises, a mobile switching center 110 for providing the complex wireless terminal with an automatic call forwarding and handoff (see paragraphs [0071], [0073]), the method including performing location registration in the home location register when the mobile switching center receives a location registration signal from the complex wireless terminal (see paragraphs [0065], [0071]); confirming, when there is an incoming request for the complex wireless

Art Unit: 2618

terminal, whether a location of the corresponding complex wireless terminal is registered in the mobile communication service area using the home location register by the mobile switching center; and providing, when the location of the complex wireless terminal is registered in the mobile communication service area as a result of the confirmation, a communication through the base station controller and base station transceiver subsystem by trying an incoming to the complex wireless terminal using the mobile communication phone number (see paragraphs [0068], [0073]-[0074]), and when the location of the complex wireless terminal is registered in the extension wireless network service area as a result of the confirmation (see paragraphs [0067], [0077]), the communication through a public exchange 302 by trying the incoming to the complex wireless terminal (see paragraphs [0079]-[0080]). Sundar further discloses a PBX exchange (see paragraph [0097]), but fails to expressly disclose a wired and wireless complex gateway for providing a communication through an extension wireless service network, and providing the communication through a public exchange by trying the incoming to the complex wireless terminal using the public phone number and the wireless terminal unique number, as recited in the claim. Kil discloses a wired and wireless complex gateway 12 (see figure 1) for providing a communication through an extension wireless service network (see paragraphs [0069], [0082]-[0085]), and providing the communication through a public exchange by trying the incoming to the complex wireless terminal using the public phone number and the wireless terminal unique number (see paragraphs [0069], [0082]-[0085]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above

Art Unit: 2618

teaching of Kil to Sundar, in order to provide the public and private mobile communication service and wire and wireless complex (or unified) communication service (as suggested by Kil at paragraph [0008]).

11. Claims 10-12, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundar as applied to claim 9 above, and further in view of Ibe (US 2004/0087307).

As to claims 10-12, the combination of Sundar and Kil fails to disclose maintaining the communication as claimed. Such a teaching is known in the art as taught by Ibe (see paragraphs [0017]-[0019], [0022], [0027]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of Ibe to the combination of Sundar and Kil, in order to provide a seamless roaming without losing connection with other party (as suggested by Ibe at paragraph [0004]).

As to claim 39, it is rejected for similar reasons as set forth in claims 10-12 above.

***Allowable Subject Matter***

12. Claims 13, 17-30 are allowed.

As to claim 13, the prior art of record fail to disclose or render obvious a complex wireless service apparatus using a wired and wireless communication system, as specified in the claim.

As to claims 17-30, the prior art of record fail to disclose or render obvious an apparatus as specified in claim 17.

13. Claims 31-38 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

As to claims 31-38, the prior art of record fail to disclose or render obvious an apparatus as specified in claim 31.

***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGUYEN VO whose telephone number is (571)272-7901. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nguyen Vo/  
Primary Examiner, Art Unit 2618  
05/08/2008

Application/Control Number: 10/776,517  
Art Unit: 2618

Page 8